For More Information:

This document provides a summary description of the investigation and activities performed at the Thomas G. Faria Corporation facility. Therefore, the public is encouraged to consult the Administrative Record for a more complete discussion. The Administrative Record includes documents containing the information on which this cleanup plan is based. These documents include this Statement of Basis and Corrective Measures Study, which provide a detailed description of the proposed cleanup plan, environmental investigation reports, and reports on remediation activities already performed at the facility.

Additionally, the Statement of Basis, the Faria Administrative Record Index, and other information on the Faria facility are available at EPA's web page for the Faria facility at:

www.epa.gov/ne/rcra/faria

Contacts

If you have questions or comments about the proposed cleanup, or any other questions, please contact us:

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Phone: (978) 589-3160
e-mail: Patrick.haskell@aecom.com

Public Meeting

June 15, 2010 at 7:00 PM
Council Chambers
Montville Town Hall
310 Norwich-New London Turnpike
Uncasville, Connecticut

Information Repository

Documents relating to environmental cleanup activities for the Faria facility are available for public review at the following information repositories:

The Raymond Library

832 Raymond Hill Road
Oakdale, CT 06370
(860) 848-9943

Hours are:
Sunday and Monday – Closed
Tuesday – 12:00 noon to 8:00 p.m.
Wednesday – 10:00 a.m. to 6:00 p.m.
Thursday – 10:00 a.m. to 6:00 p.m.
Saturday – 9:00 a.m. to 1:00 p.m.

US EPA Records Center

5 Post Office Square, Suite 100
Boston, MA 02109-3912
(617) 918-1420

Hours are Monday – Friday:
10:00 a.m. to 1:00 p.m. and
2:00 p.m. to 5:00 p.m.

AECOM Environment
2 Technology Park Drive
Westford, MA 01886

Thomas G. Faria Corporation
World Class Instrumentation

Site-wide Cleanup Plan

Thomas G. Faria Corporation
Uncasville, CT

May 2010

The U.S. Environmental Protection Agency (EPA) and the Connecticut Department of Environmental Protection (DEP) are requesting public comment on a proposal to conduct an environmental cleanup at the Thomas G. Faria Corporation (Faria) facility at 385 Norwich – New London Turnpike, Uncasville, CT. This fact sheet has been prepared to inform you of Faria's proposed cleanup plan, to encourage community input on the cleanup plan, and to direct you to where you can find more information.

Federal and state environmental laws govern cleanup activities at the Faria facility. A federal law called the Resource Conservation and Recovery Act (RCRA) provides procedures for investigating and cleaning up environmental problems. Under this law, Faria is pursuing cleanup such that conditions will be safe for humans and the environment. Faria has worked closely with EPA and DEP to investigate the site and develop this cleanup plan to achieve the required cleanup goals.

Site Background

The Faria facility is located on a seven-acre property in Uncasville, CT and consists of 100,000 square feet of manufacturing and storage buildings. The facility was initially constructed as a woolen mill in the 19th century. Faria purchased the property in 1964, and have manufactured gauges for motor-powered vehicles since that time. As was typical for manufacturing operations at the time, Faria used chlorinated organic solvents, including tetrachloroethylene, for degreasing metal parts until 1987. Faria stored waste solvent on-site prior to off-site disposal. Faria also performed electroplating of metal parts from 1973 to 1981 and dried metal hydroxide sludges from its wastewater treatment system in a series of four state-permitted surface impoundments on-site.

The facility is bordered on the north, east and south by residential properties and to the west by residential and commercial properties and undeveloped areas. Oxoboxo Brook runs through the property from west to east and flows into the Thames River east of the site. The groundwater at the Faria facility and in the downgradient area, through which groundwater from the facility flows, is classified by DEP as "GA". Groundwater classified as GA is intended for existing private and potential public or private supplies of water suitable for drinking without treatment.

Environmental Investigations & Cleanup

In the early 1980s, private drinking water wells near the facility were found to contain chlorinated volatile organic compounds (VOCs), believed to be from Faria's operations. In 1982, DEP negotiated a Consent Agreement with Faria requiring Faria to provide an alternate water supply to homes where VOCs were detected in their water supply wells. Faria met its obligations under this order, providing public water connections to 18 properties and began cleanup of the facility.

PUBLIC COMMENT PERIOD

Let us know what you think!
June 1 – July 16, 2010

Written comments on this Proposal for Site-wide Cleanup can be submitted to EPA during this comment period. Comment letters must be postmarked no later than July 16, 2010, and can be sent to:

Stephanie Carr
EPA Region 1
5 Post Office Square – Suite 100
Mail Code: OSRR07-03
Boston, MA 02109-3912
Email: carr.stephanie@epa.gov
Fax: (617) 918-0363

PUBLIC MEETING

Montville Town Hall – Council Chambers
June 15, 2010 at 7:00 PM

During this public meeting, Faria will provide a presentation and host an informal question-and-answer session.

RDMS DocID 108274

Since 1982, Faria has completed the following cleanup activities:

- Faria has made public water available to the entire neighborhood and has provided public water connections to several other properties.
- In 1983, Faria removed VOC-contaminated soil from beneath an outside storage area north of building M-10 where it had stored waste solvents.
- In 1983, Faria removed and properly disposed of residual waste sludges from its on-site surface impoundments.
- In 1985, Faria installed an on-site groundwater treatment system which pumped impacted groundwater from under the facility, treated it to remove the VOCs, and discharged the treated groundwater into Oxoboxo Brook under a DEP-issued permit.
- During the 1990s, Faria removed four above-ground fuel oil tanks and their concrete pads.
- In 2000, Faria replaced the 1985 groundwater treatment system with a larger system that pumped additional groundwater to better contain the off-site migration of VOCs in groundwater. The system treated groundwater using an air stripper to transfer VOCs in water to air and treated the air with carbon filtration prior to release.
- In 2003, Faria installed subsurface ventilation systems in four homes located on Pink Row designed to prevent VOC vapors from contaminated groundwater beneath the homes from entering the homes through the foundation.

In 1999, EPA issued a RCRA § 3013 order to Faria requiring investigation of environmental impacts at the facility. Faria performed such an investigation to gain sufficient understanding of the conditions at the site to develop this cleanup plan. The details of the cleanup plan are provided in this fact sheet.

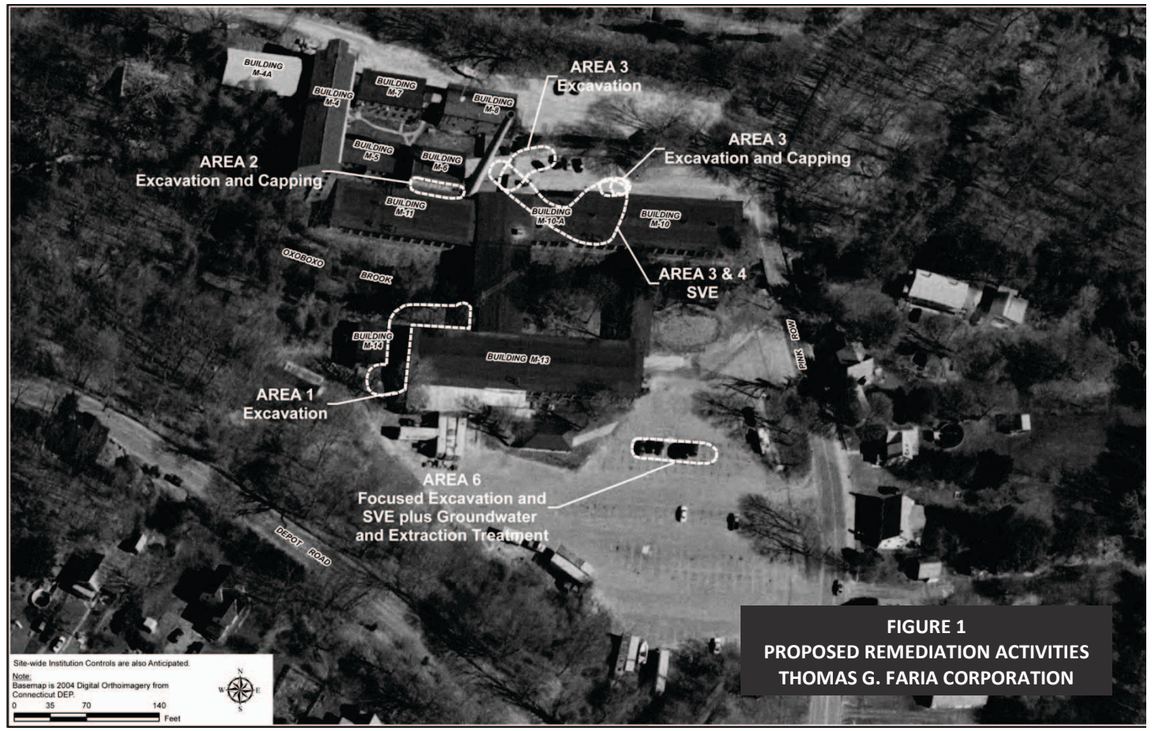

FIGURE 1
PROPOSED REMEDIATION ACTIVITIES
THOMAS G. FARIA CORPORATION

Site-wide Cleanup Plan – Thomas G. Faria Corporation, Uncasville, CT

Area 7 – Off-site Groundwater Plume

Description: Since the installation of the original groundwater extraction and treatment system in 1985, Faria has continued to install and test monitoring wells to define the extent of VOCs in groundwater between its facility and the Thames River. These test results have shown substantial decreases in VOC concentrations in groundwater over time, due to Faria's cleanup actions and the natural attenuation of chemicals in the environment.

Proposal: A large portion of the cleanup for Area 7 is already in place. Faria has provided public water to the neighborhood and connected properties with impacted wells to the public water service. Faria installed, and later upgraded, the groundwater extraction and treatment system. Faria also installed subsurface ventilation systems in four homes as a precaution to keep vapors from entering the homes. These measures will continue to prevent exposures to VOCs while cleanup proceeds.

The groundwater extraction and treatment system upgrades proposed for the site are expected to prevent any migration of VOCs in groundwater from the Faria property. This will allow VOC concentrations to continue to decrease in the area downgradient of Faria until they meet drinking water standards. Faria will monitor off-site groundwater conditions to verify that the VOC concentrations continue to decrease over time and that the aquifer is being restored by the cleanup at the Faria facility.

Next Steps

The next steps in implementing and completing the proposed cleanup plan, if it is approved by EPA and DEP following the review of public comments are:

Long-term Stewardship Permit

Concurrent with the public comment period for the proposed cleanup plan, Faria is applying for the DEP's Long-term Stewardship Permit, which defines the long-term obligations for Faria and ensures that cleanup is documented as it is completed. This permit would also provide financial assurance to ensure that funds are available for the cleanup. This permit requires a public comment period, which is anticipated to take place during 2011.

Cleanup Plan Implementation

After approval of the cleanup plan by EPA and DEP, Faria would collect additional site data to design the expanded groundwater extraction and treatment system, with the aim of having a detailed system design and monitoring plan in 2010. Following acceptance of the design by EPA and DEP, Faria would likely construct and start operating the modified groundwater extraction and treatment system during the Summer of 2011. A design plan for the soil excavation, capping, and construction of the SVE system would follow during the fall of 2011 with construction to occur in spring of 2012.

Treatment System Operation and Maintenance

After the soil excavation is complete and the SVE and groundwater extraction and treatment systems are constructed, it is anticipated that these systems will operate for several years before soil vapor and groundwater comply with the CT RSR cleanup criteria. During this period, Faria would perform regular monitoring of VOC concentrations in soil vapor in areas being addressed by the SVE system. In addition, Faria would monitor VOC concentrations in groundwater on the facility property and in the off-site downgradient area.

Public Participation

All interested persons are invited to express their views on the cleanup plan. Public comment on all proposals and supporting information is an important contribution to EPA's and DEP's decision making. A comment form and mailer is included in this fact sheet.

In addition, a public information meeting will be held on June 15, 2010 and will include a brief presentation on the cleanup proposal described in this fact sheet. The meeting will provide an opportunity for questions and discussions.

Following the public meeting and review of public comments, EPA and DEP will decide whether to provide final approval of the cleanup plan. EPA and DEP will not make a final decision regarding the cleanup plan until the public comment period has closed and all received comments have been evaluated and addressed. Based on any substantial new information or comments from the public, EPA and DEP may request that Faria modify this plan. A brief decision-making document that responds to comments will be prepared by EPA and DEP to address all significant public comments received during the public comment period. If the comments are such that significant changes are made to this proposal, EPA and DEP will seek additional public comments on a revised plan. If no significant comments are received, EPA and DEP's final decision will be issued in a letter to Faria.

Fold on line, staple, stamp and mail.

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Stephanie Carr

EPA Region 1

5 Post Office Square – Suite 100

Mail Code: OSRR07-03

Boston, MA 02109-3912

Proposed Cleanup Plan

The following cleanup measures are proposed for the seven areas of the site with environmental impacts, which are shown on Figure 1. The goals of the proposed cleanup actions at Faria are to:

- Clean up the site to ensure conditions remain safe for humans and the environment; and
- Comply with the Connecticut Remediation Standard Regulation (RSR) Cleanup Criteria.

Area 1 – Former Aboveground Storage Tanks

Description: This area formerly included four 275-gallon fuel oil aboveground storage tanks (ASTs), which were removed in the 1990s. Surface soil in this area has been found to contain elevated levels of polycyclic aromatic hydrocarbons (PAHs), classified as semi-volatile organic compounds (SVOCs), which may have resulted from small releases of fuel oil. The area of impacted soil extends to a depth of less than two feet below the ground surface in an approximately 3,300 square-foot area.

Proposal: The cleanup plan for this area is to excavate impacted soil and dispose of it at an appropriate permitted facility. Following excavation, remaining soil would be tested to ensure compliance with the CT RSRs, and the area would be backfilled with clean fill and topsoil to the original grade and landscaped.

Area 2 – Alley between Buildings M-6 and M-11

Description: This area is an alley that extends between Building M-6 and M-11. Elevated concentrations of metals are present in soil to an unknown depth in this 600 square-foot area. Access to this area is limited by the presence of the facility smokestack.

Proposal: Due to the limited access to this area and the concern for undermining the stability of adjacent buildings and smokestack, it is not feasible to excavate all impacted soil in this area. Therefore, the proposal is to excavate soil to a depth of two feet and dispose of it at an appropriate permitted facility. The remaining soil would be capped with a layer of low-permeability soil and pavement to prevent human contact and prevent leaching of remaining metals. An Environmental Land Use Restriction (ELUR) would be recorded on the land records for this area to ensure that the cap is maintained and not disturbed.

Area 3 – Area North of Building M-10 and M-11

Description: Elevated concentrations of arsenic, PAHs, and VOCs have been detected in soil above the water table in this area, and elevated concentrations of chromium have been detected in one groundwater monitoring well.

Proposal: Soil would be excavated to a depth of two feet, as deeper excavation could compromise the stability of adjacent buildings. Remaining soil would be capped with a layer of low-permeability soil and pavement to prevent leaching of remaining soils. An ELUR would be recorded on the land records for this area to ensure that the cap is maintained and not disturbed. A soil vapor extraction system (SVE) system would also be installed to address VOCs in soil (see discussion of SVE system in Area 4).

Area 4 – Soil Impact below Building M-10

Description: VOCs are present in soil in an estimated 3,500 square-foot area, extending to the depth of the water table (12 feet below the ground surface) under Building M-10. This VOC-impacted soil is contiguous with that in Area 3, and the two areas will be cleaned up together. There is also an area with elevated concentrations of metals and PAHs in soil beneath Building M-10.

Proposal: Faria plans to maintain Building M-10, and thus underlying soils are not accessible for excavation. Therefore, SVE is proposed to remove VOCs from soils above the water table in Areas 3 and 4. SVE works by drawing vapors through soils to a series of wells that are put under a vacuum. SVE thereby removes VOCs bound to soil and prevents VOC vapors from entering the overlying building. Faria would treat the extracted vapors by carbon filtration to remove VOCs prior to release to the atmosphere.

For metals and PAHs in soil beneath Building M-10, the presence of the building would prevent contact with these soils and prevent these contaminants from leaching into groundwater. An ELUR would be recorded for the area to ensure that the building stays in place.

Area 5 – Oxoboxo Brook and Gairs Pond

Description: Oxoboxo Brook is approximately 15 feet wide where it passes through the Faria facility in a stream channel dating from when the brook powered the woolen mill. In the section of Oxoboxo Brook that passes through the Faria property, the water moves at a fast speed and the streambed consists of cobbles and boulders with minimal sand and gravel. Oxoboxo Brook discharges to Gairs Pond, a man-made impoundment located approximately 200 feet downstream of the Faria facility property. The brook then empties over an approximately 15-foot high spillway to the Thames River.

Isolated portions of the brook where sediment was present contained elevated concentrations of PAHs and metals at the facility. However, samples of sediment from Gairs Pond downstream showed PAH and metal concentrations similar to those in surface sediments from ponded areas upstream of Faria.

Proposal: Impacted areas of the brook are limited in area and depth and consist of very little sediment. Removing the little amounts of impacted sediment present is not practical, as it would involve scraping the rocks in areas where access is very difficult, and little benefit would result. Planned remediation activities would address areas of the Faria property that could transport PAHs and metals to the brook in stormwater run-off. Therefore, no direct remediation of the brook is planned. Likewise, no remediation is proposed for Gairs Pond, because chemical concentrations in the pond are consistent with ponds upstream of Faria.

Area 6 – Southern Parking Lot

Description: Soil and groundwater under Faria's southern parking lot contain VOCs. These VOCs are thought to have been released through the former facility septic system. When use of the septic tank ceased in 1982, its contents were pumped out and disposed and the tank was filled with soil. The existing groundwater treatment system was installed in this area to contain VOCs in groundwater.

Recent studies have shown that VOCs in soil in the area of the former septic tank may be dissolving into groundwater. An area of approximately 13,000 square feet extending to depths of 4 to 25 feet, including the former septic tank and leach field, has VOCs in soil at levels that could impact groundwater. However, the area where VOCs appear most concentrated is the 300 square foot area surrounding the former septic tank.

Proposal: The proposal for Area 6 involves three main components: excavation, soil vapor extraction, and groundwater extraction and treatment.

- **Excavation:** The proposal is to remove the former septic tank and distribution box and to excavate surrounding soil over an approximately 300 square foot area to the depth of the seasonal low water table (approximately 10 feet below the ground surface). Excavated soil and debris would be disposed at an off-site disposal facility.
- **Soil Vapor Extraction (SVE):** Soil vapor extraction is proposed to reduce VOC concentrations in remaining soils above the water table in an approximately 13,000 square-foot area. Vapor extraction wells would be installed in this area and connected via underground piping to the SVE system proposed for Areas 3 and 4. The system would draw vapors through soils to these extraction wells, thereby removing the VOCs bound to soil and treating them prior to discharge.
- **Groundwater Extraction and Treatment:** Since 2000, Faria has operated the existing groundwater extraction and treatment system that pumps deep groundwater from an extraction well installed in sands present 30 to 60 feet below ground. The treatment system uses an air stripper to transfer VOCs from groundwater to air, treats the air with carbon filtration prior to release, and discharges treated water to Oxoboxo Brook under a DEP-issued permit. The system has been successful in removing VOCs from groundwater and reducing migration of VOC-contaminated groundwater from the property. Faria is proposing to expand the extraction well network to include extraction of shallow groundwater and increase the rate of deep groundwater extraction. Approximately 6 shallow extraction wells would be installed, and the pumping rate at the existing deep extraction well would be increased. The goal of these improvements would be to prevent the migration of impacted groundwater from the Faria property. Groundwater testing would be performed at wells on the Faria property and off-site to evaluate system performance.

We Welcome Your Comments

The EPA and DEP welcome your input on this proposal for cleanup at the Thomas G. Faria Corporation (Faria) facility located at 385 Norwich – New London Turnpike, Uncasville, CT. This form is provided to make it easier for you to provide written comments via mail or fax. EPA also welcomes comments by e-mail. Please fax, e-mail, or postmark your comments no later than July 16, 2010 to:

Stephanie Carr
EPA Region 1
5 Post Office Square – Suite 100
Mail Code: OSRR07-03
Boston, MA 02109-3912
Email: carr.stephanie@epa.gov
Fax: (617) 918-0363

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Comment submitted by: _____